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AP35518 (072396.0263)
PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicants	:	Robbins *et al.*	Customer No.:	21003
Serial No.	:	10/807,755	Examiner:	Not Yet Assigned
Filed	:	March 24, 2004	Group Art Unit:	1646
For	:	A COMPACT SYNTHETIC EXPRESSION VECTOR COMPRISING DOUBLE-STRANDED DNA MOLECULES AND METHODS OF USE THEREOF		

INFORMATION DISCLOSURE STATEMENT

I hereby certify that this paper is being deposited with the United States Postal Service as first class mail in an envelope addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

June 24, 2004
Date

Rochelle K. Seide
Attorney Name

32,300
PTO Reg. No

Rochelle K. Seide
Signature

June 24, 2004
Date of Signature

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

Pursuant to 37 C.F.R. §§1.97 and 1.98, Applicants respectfully request that the documents listed below and on the accompanying PTO 1449 be considered by the Examiner and made of record in the above-referenced application. Copies of the listed documents are enclosed.

1. Martinez *et al.* Single-Stranded Antisense siRNAs Guide Terget RNA Cleavage in RNAi. Cell 2002;110:563-74;

2. Zeng *et al.* Both Natural and Designed Micro RNAs Can Inhibit the Expression of Cognate mRNAs When Expressed in Human Cells. Mol. Cell 2002;9:1327-1333;

3. Stanojevic and Young. A Highly Potent Artificial Transcription Factor. Biochemistry 2002;41:7209-7216;

4. Xia *et al.* siRNA-mediated gene silencing in vitro and in vivo. Nature Biotech. 2002;20:1006-10;

5. Matheos *et al.* Ku antigen, an origin-specific binding protein that associates with replication proteins, is required for mammalian DNA replication. Biochim. Biophys. Acta. 2002;1578:59-72;

6. Jacque *et al.* Modulation of HIV-1 replication by RNA interference. Nature 2002;418:435-438;

7. Opalinska and Gewirtz. Nucleic-acid therapeutics: basic principles and recent applications. Nat Rev Drug Discov 2002;1:503-14;

8. Gary Ruvkun. Glimpses of a Tiny RNA World. Science 2001;2294:797-799;

9. Robert Barstead. Genome-wide RNAi. Curr. Opin. Chem. Biol. 2001;5:63-66;

10. Phillip D. Zamore. RNA interference: listening to the sound of silence. Nat. Struct. Biol. 2001;8:746-750;

11. Fjose *et al.* RNA interference: mechanisms and applications. Biotechnol. Annu. Rev. 2001;7:31-57;

12. Zhao *et al.* Double-Stranded RNA Injection Produces Nonspecific Defects in Zebrafish. Dev. Biol. 2001;229:215-223;

13. Kassavetis *et al.* The RNA polymerase III transcription initiation factor TFIIIB participates in two steps of promoter opening. EMBO J. 2001;20:2823-2834;

14. Mark Lewandoski. Conditional control of gene expression in the mouse. Nat. Rev. Genet. 2001;2:743-755;

15. Reinhart *et al.* The 21-nucleotide let-7 RNA regulates developmental timing in Caenorhabditis elegans. Nature 2000;403:901-906;

16. Tavernarakis et al. Heritable and inducible genetic interference by double-stranded RNA encoded by transgenes. Nat. Genet. 2000;24:180-183;

17. Nakano *et al.* RNA Interference for the Organizer-Specific Gene Xlim-1 in Xenopus Embryos. Biochem. Biophys. Res. Commun. 2000;274:434-439;

18. Svoboda *et al*, Selective reduction of dormant maternal mRNAs in mouse oocytes by RNA interference. Development 2000;127:4147-4156;

19. Ohkawa and Taira. Control of the Functional Activity of an Antisense RNA by a Tetracycline-Responsive Derivative of the Human U6 snRNA Promoter. Human Gene Ther. 2000;11:577-585;

20. Olejnik *et al.* Photocleavable aminotag phosphoramidites for 5'-termini DNA/RNA labeling. Nucl. Acids Res. 1998;26:3572-3576;

21. Wang *et al.* Plasmids for the in vitro analysis of RNA polymerase II-dependent transcription based on a G-free template. Biochimica et Biophysica Acta 1998;1397:141-145;

22. Tichelaar *et al.* In Vivo Expression of a Variant Human U6 RNA from a Unique, Internal Promoter. Biochemistry 1998;37:12943-12951;

23. Nyanguile *et al.* A nonnatural transcriptional coactivator. Proc. Natl. Acad. Sci. USA 1997;94:13402-13406;

24. Jacobs and Langland. When Two Strands Are Better Than One: The Mediators and Modulators of the Cellular Responses to Double-Stranded RNA. Virology 1996;219:339-349;

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26. Alan E. Smith. Viral vectors in gene therapy. Ann. Rev. Microbiol. 1995;49:807-838;

27. Yang *et al.* Cellular and Humoral Immune Responses to Viral Antigens Create Barriers to Lung-Directed Gene Therapy with Recombinant Adenoviruses. J. Virol. 1995;69:2004-2015;

28. Izban *et al.* RNA Polymerase II Ternary Complexes May Become Arrested after Transcribing to within 10 Bases of the End of Linear Templates. J. Biol. Chem. 1995;270:2290-2297;

29. Krebs *et al.* The JC Virus Minimal Core Promoter Is Glial Cell Specific In Vivo. J. Virol. 1995;69:2434-2442;

30. Pan and Greenblatt. Initiation of Transcription by RNA Polymerase II Is Limited by Melting of the Promoter DNA in the Region Immediately Upstream of the Initiation Site. J. Biol. Chem. 1994;269:30101-30104;

31. Lee *et al.* The C. elegans Heterochronic Gene lin-4 Encodes Small RNAs with Antisense Complementarity to lin-14. Cell 1993;75:843-54;

32. Richard C. Mulligan. The Basic Science of Gene Therapy. Science 1993;260:926-932;

33. Hubbell *et al.* Cyclic AMP mediates the direct antiproliferative action of mismatched double-stranded RNA. Proc. Natl. Acad. Sci. USA 1991;88:906-910;

34. Zaug *et al.* The Tetrahymena ribozyme acts like an RNA restriction endonuclease. Nature 1986;324:429-33;

35. Gelboin *et al.* Polyinosinic-Polycytidylic Acid Inhibits Chemically Induced Tumorigenesis in Mouse Skin. Science 1970;167:205-207;

36. Levy *et al.* Inhibition of tumor growth by polyinosinic-polycytidylic acid. Proc. Nat. Acad. Sci. USA 1969;62:357-361; and

37. Zeleznick *et al.* Treatment of Leukemic (L-1210) Mice with Double-Stranded Polyribonucleotides (33503). Proc. Soc. Exp. Biol. Med. 1969;130:126-128.

This submission does not represent that a search has been made or that no better art exists and does not constitute an admission that the listed documents are material or constitute "prior art." If the Examiner applies the documents as prior art against any claim in the application and Applicants determine that the cited documents do not constitute "prior art" under United States law, Applicants reserve the right to present to the Office the relevant facts and law regarding the appropriate status of the documents.

Applicants further reserve the right to take appropriate action to establish the patentability of the disclosed invention over the listed documents, should the documents be applied against the claims of the present application.

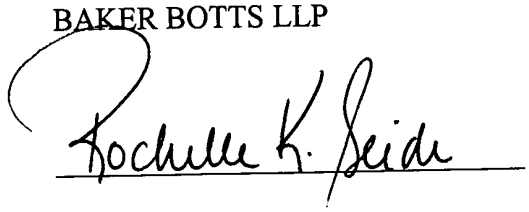
This Information Disclosure Statement is being filed before the mailing date of the first Office Action on the merits of referenced application. Therefore, Applicants do not believe that any fee is due in connection with the submission of this paper. However, if any fee is due, or if any overpayment has been made, the Commissioner is authorized

to charge any such fee or credit any overpayment, to our Deposit Account No. 02-4377.

Duplicate copies of this sheet are enclosed.

Respectfully submitted,

BAKER BOTTS LLP



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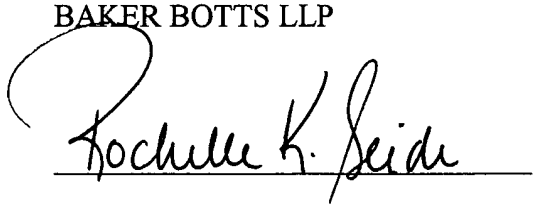

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Form-PTO-1449 (REV. 2-82) U.S. Department of Commerce Patent and Trademark Office

INFORMATION DISCLOSURE STATEMENT BY APPLICANT
(Use several sheets if necessary)

Atty. Docket No.	Serial No.
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Applicants: Robbins *et al.*	
Filing Date: March 24, 2004	Group Art Unit: 1646

U.S. PATENT DOCUMENTS

*Exam. Init.		Document No.	Date	Name	Class	Subclass	Filing Date if Appropriate

FOREIGN PATENT DOCUMENT

		Document No.			Class	SubClass	Translator Yes	Translator No

OTHER DOCUMENTS (including Author, Title Date, Pertinent Pages, Etc.)

		1.	Martinez *et al.* Single-Stranded Antisense siRNAs Guide Terget RNA Cleavage in RNAi. Cell 2002;110:563-74.
		2.	Zeng *et al.* Both Natural and Designed Micro RNAs Can Inhibit the Expression of Cognate mRNAs When Expressed in Human Cells. Mol. Cell 2002;9:1327-1333.
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* Examiner: Initial citation considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not conformance and not considered. Include copy of this form with next communication to applicant.

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		11.	Fjose *et al.* RNA interference: mechanisms and applications. Biotechnol. Annu. Rev. 2001;7:31-57.
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